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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,302	11/20/2003	Shigehiro Asano	AUS920030613US1	9788
77351	7590	12/22/2010		
IBM CORP. (AUS) C/O THE LAW OFFICE OF JAMES BAUDINO, PLLC 600 SIX FLAGS DRIVE SUITE 400 ARLINGTON, TX 76011			EXAMINER HAILE, FEBEN	
			ART UNIT 2474	PAPER NUMBER
			MAIL DATE 12/22/2010	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/718,302

Applicant(s)

ASANO ET AL.

Examiner

FEBEN HAILE

Art Unit

2474

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 November 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4 and 7 is/are pending in the application.
- 4a) Of the above claim(s) 2, 3, 5 and 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4 and 7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on November 20, 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, corresponding to claims 1, 4, and 7, in the reply filed on November 11, 2010 is acknowledged.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the limitations of claim 7, i.e. a computer program product for minimizing congestion in resource access, the computer program product having a medium with a computer program embodied thereon, must find clear support in the description so that the meaning of the terms and phrases used in the claims may be ascertainable by reference to the description.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claim 7 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The Examiner notes this claims disclose a "the computer program product having a medium". The broadest reasonable interpretation of a claim drawn to a medium typically covers forms of non-transitory tangible media and transitory propagating signals per se in view of the ordinary and customary meaning of media, particularly when the specification is silent. A claim drawn to such a medium that encompasses both scenarios may

be amended to narrow the claim to over only statutory embodiments by adding the limitation "non-transitory" to the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 4, and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Fouladi et al. (US 7,538,772), hereinafter referred to as Fouladi.

Regarding claim 1, Fouladi discloses

A method for dynamic bandwidth management proportionately distributing resource allocation within a time period (**column 10 lines 18-38; bandwidth control in memory resource arbitration for a number of clock cycles**) as a function of an executing task, comprising:

tagging system commands with a bandwidth identifier (**column 13 lines 17-20; arbitration control for memory access is controlled by a bandwidth dial register**);

setting bandwidth limits for resources (**column 9 lines 60-62; bandwidth requirements of resources requesting memory access**) with programmable hardware registers (**figure 8 and column 10 lines 27-31; programmable bandwidth control registers**);

issuing commands to managed resources (**column 19 lines 13-18; arbitration control between resources**);

establishing a hardware bandwidth management system that indicates how the managed resources can be used during a programmable time slice (**figure 8 and column 10 lines 18-38; bandwidth control utilizing the programmable registers to control bandwidth allocation of a memory in a number of clock cycles**); and

issuing commands to unmanaged resources (**column 19 lines 13-18; arbitration control between resources**).

Regarding claim 4, Fouladi discloses

A method of minimizing congestion in resource access (**column 10 lines 18-19; bandwidth control in memory resource arbitration**) comprising the steps of:

sending predetermined numbers of managed commands (**column 19 lines 13-18; arbitration control between competing resources**) only during times permitted by a bandwidth control mechanism (**column 10 lines 34-38; the arbitration is controlled by registers utilized to control bandwidth allocation of a memory in a number of clock cycles**); and

adjusting values inserted in programmable registers to set the number and timing of managed commands issued by a program (**figure 8 and column 10 lines 23-38; registers are utilized to permit an application programmer to control the bandwidth allocation of the memory in the number of clock cycles**).

Regarding claim 7, Fouladi discloses

A computer program product (**column 30 lines 14-15; a system including various drives and associated computer readable media**) for minimizing congestion in resource access

(column 10 lines 18-19; **bandwidth control in memory resource arbitration**), the computer program product having a medium with a computer program embodied thereon (column 30 lines 24-28; **the drives and their associated computer readable media provide nonvolatile storage of program modules**), the computer program comprising:

computer code (column 30 lines 37-40 **the program modules include program data**) for sending managed commands (column 19 lines 13-18; **arbitration control between competing resources**) only during times permitted by a bandwidth control mechanism (column 10 lines 34-38; **the arbitration is controlled by registers utilized to control bandwidth allocation of a memory in a number of clock cycles**); and

computer code (column 30 lines 37-40 **the program modules include program data**) for adjusting values inserted in programmable registers to set the number and timing of managed commands issued by a program (**figure 8 and column 10 lines 23-38; registers are utilized to permit an application programmer to control the bandwidth allocation of the memory in the number of clock cycles**).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- a) Fukuyama et al. (US 7,350,004), Resource Management Device
- b) Nowshadi (US 7,474,670), Method and System for Allocating Bandwidth
- c) Dignum et al. (US 7,647,444), Method and Apparatus for Dynamic Hardware

Arbitration

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FEBEN HAILE whose telephone number is (571)272-3072. The examiner can normally be reached on 10:00 am-6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on (571)272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aung S. Moe/
Supervisory Patent Examiner, Art Unit 2474

/FEBEN HAILE/
Examiner, Art Unit 2474